

ROUTING AND TRANSMITTAL SLIP

Date

7-25-88

TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1. JIM PENDERGAST		
2. EPA		
3. 6H-EE		
4.		
5.		

Action	File	Note and Return
Approval	For Clearance	<input checked="" type="checkbox"/> Per Conversation
As Requested	For Correction	Prepare Reply
Circulate	For Your Information	See Me
Comment	Investigate	Signature
Coordination	Justify	

REMARKS



(214) 767-4760

ALEX F. GIMBLE  
Industrial Hygienist

U.S. Department of Labor  
Occupational Safety and Health  
Federal Building  
525 Griffin Street  
Dallas, Texas 75202

of Administration

DO NOT

FTS. 729-4760

disposals.

FROM: (Name, org. symbol, Agency/Post)

Room No.—Bldg.

Alex F. Gimble, OSHA

Phone No.

729-4760

5041-102

\*U.S.GPO:1986-0-491-247/20047

OPTIONAL FORM 41 (Rev. 7-78)  
Prescribed by GSA  
FPMR (41 CFR) 101-11.206

006377

205

## ITEM 1

8001-58-9

## COAL TAR CREOSOTE

BRICK OIL; COAL TAR OIL; LIQUID PITCH OIL; DEAD OIL; NAPHTHALENE OIL; WASH OIL;  
CREOSOTE; CREOSOTE, COAL TAR; CREOSOTE FROM COAL TAR; CREOSOTUM; CRESYLIC  
CREOSOTE; HEAVY OIL; TAR OIL; RCRA U051; OHS05230

CERCLA RATINGS (SCALE 0-3): HEALTH=3 FIRE=2 REACTIVITY=0 PERSISTENCE=3

NFPA RATINGS (SCALE 0-4): HEALTH=2 FIRE=2 REACTIVITY=0

## COMPONENTS AND CONTAMINANTS

COMPONENT: COAL TAR CREOSOTE

PERCENT: 100

OTHER CONTAMINANTS: NONE

## EXPOSURE LIMITS:

COAL TAR CREOSOTE AS COAL TAR PITCH VOLATILES:

0.2 MG/M3 OSHA TWA (AS BENZENE SOLUBLES)

0.2 MG/M3 ACGIH TWA (AS BENZENE SOLUBLES)

ACGIH A1-CONFIRMED HUMAN CARCINOGEN.

0.1 MG/M3 NIOSH RECOMMENDED 10 HOUR TWA (CYCLOHEXANE-EXTRACTABLE FRACTION)

1 POUND CERCLA SECTION 103 REPORTABLE QUANTITY

## PHYSICAL DATA

DESCRIPTION: COLORLESS, YELLOW, OR DARK GREEN-BROWN OILY LIQUID WITH A HEAVY  
SMOKY ODOR AND A CAUSTIC BURNING TASTE

BOILING POINT: 382-752 F (194-400 C)

SPECIFIC GRAVITY: 1.05-1.10 VAPOR PRESSURE: NOT AVAILABLE

EVAPORATION RATE: NOT AVAILABLE SOLUBILITY IN WATER: INSOLUBLE

SOLVENT SOLUBILITY: ALCOHOL, BENZENE, TOLUENE, ETHER, FIXED OR VOLATILE

OILS, GLYCERIN, SOLUTIONS OF FIXED ALKALI HYDROXIDES

## FIRE AND EXPLOSION DATA

FIRE AND EXPLOSION HAZARD:

MODERATE FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME.

FLASH POINT: 165 F (74 C) (CC) AUTOIGNITION TEMP.: 637 F (336 C)

FLAMMABILITY CLASS(OSHA): IIIA

FIREFIGHTING MEDIA:

DRY CHEMICAL, CARBON DIOXIDE, WATER SPRAY OR FOAM  
(1984 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.3).FOR LARGER FIRES, USE WATER SPRAY, FOG OR FOAM  
(1984 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.3).

## FIREFIGHTING:

MOVE CONTAINER FROM FIRE AREA IF POSSIBLE. COOL FIRE-EXPOSED CONTAINERS WITH  
WATER FROM SIDE UNTIL WELL AFTER FIRE IS OUT. FOR MASSIVE FIRE IN STORAGE

AREA, USE UNMANNED HOSE HOLDER OR MONITOR NOZZLES, ELSE WITHDRAW FROM AREA

AND LET FIRE BURN. WITHDRAW IMMEDIATELY IN CASE OF RISING SOUND FROM VENTING

SAFETY DEVICE OR ANY DISCOLORATION OF STORAGE TANK DUE TO FIRE (1984 EMERGENCY  
RESPONSE GUIDEBOOK, DOT P 5800.3, GUIDE PAGE 27).EXTINGUISH ONLY IF FLOW CAN BE STOPPED; USE FLOODING AMOUNTS OF WATER AS A  
FOG; SOLID STREAMS MAY BE INEFFECTIVE. COOL CONTAINERS WITH FLOODINGAMOUNTS OF WATER, APPLY FROM AS FAR A DISTANCE AS POSSIBLE. AVOID BREATHING  
VAPORS; KEEP UPWIND.WATER MAY BE USED TO BLANKET FIRE (NFPA FIRE PROTECTION GUIDE ON HAZARDOUS  
MATERIALS, EIGHTH EDITION).

## TRANSPORTATION DATA

COMBUSTIBLE LIQUID  
DEPARTMENT OF TRANSPORTATION LABELING REQUIREMENTS 49CFR172.101 AND 172.402:  
NONE  
DEPARTMENT OF TRANSPORTATION PACKAGING REQUIREMENTS: NONE  
EXCEPTIONS: 49CFR173.116A

#### TOXICITY

COAL TAR CREOSOTE:  
725 MG/KG ORAL-RAT LD50; 433 MG/KG ORAL-MOUSE LD50; 600 MG/KG ORAL-DOG LDLO;  
600 MG/KG ORAL-RABBIT LDLO; 600 MG/KG ORAL-CAT LDLO; MUTAGENIC DATA (RTECS);  
REPRODUCTIVE EFFECTS DATA (RTECS); TERATOGENIC DATA (RTECS).  
CARCINOGEN. STATUS: KNOWN HUMAN CARCINOGEN (NTP) (SOOTS, TARS, MINERAL OILS);  
ANIMAL SUFFICIENT EVIDENCE (IARC); HUMAN LIMITED EVIDENCE (IARC). THERE IS  
SUFFICIENT EVIDENCE FOR THE CARCINOGENICITY IN EXPERIMENTAL ANIMALS OF CREOSOTE  
OILS AND LIMITED EVIDENCE THAT COAL-TAR DERIVED CREOSOTES ARE CARCINOGENIC IN  
HUMANS.

COAL TAR CREOSOTE IS A MUCOUS MEMBRANE IRRITANT, AND A SEVERE SKIN AND EYE  
IRRITANT.

#### HEALTH EFFECTS AND FIRST AID

##### INHALATION:

COAL TAR CREOSOTE:  
IRRITANT.

ACUTE EXPOSURE- MAY CAUSE MODERATE RESPIRATORY TRACT IRRITATION. IN ONE  
STUDY OF WORKERS WHO DEVELOPED CREOSOTE BURNS, A SMALL PERCENT ALSO  
COMPLAINED OF DEPRESSION, WEAKNESS, SEVERE HEADACHE, SLIGHT CONFUSION,  
VERTIGO, SALIVATION, AND NAUSEA. IT IS UNCLEAR WHETHER THE ROUTE OF  
EXPOSURE WAS SKIN CONTACT OR INHALATION OR BOTH.

CHRONIC EXPOSURE- A STUDY OF WORKERS SPRAYING WARMED CREOSOTE WITH  
CONCENTRATIONS UP TO 0.01 MG/L REPORTED HEADACHES, DIZZINESS, NAUSEA,  
VOMITING, AND SALIVATION.

FIRST AID- REMOVE FROM EXPOSURE AREA TO FRESH AIR IMMEDIATELY. IF BREATHING  
HAS STOPPED, GIVE ARTIFICIAL RESPIRATION. MAINTAIN AIRWAY AND BLOOD  
PRESSURE AND ADMINISTER OXYGEN IF AVAILABLE. KEEP AFFECTED PERSON WARM AND  
AT REST. ADMINISTRATION OF OXYGEN SHOULD BE PERFORMED BY QUALIFIED  
PERSONNEL. GET MEDICAL ATTENTION IMMEDIATELY.

##### SKIN CONTACT:

COAL TAR CREOSOTE:  
CORROSIVE/CARCINOGEN.

ACUTE EXPOSURE- THE LIQUID AND VAPORS ARE STRONG IRRITANTS AND MAY CAUSE A  
BURNING SENSATION, ITCHING, LOCAL ERYTHEMA PROGRESSING TO A BRONZE  
PIGMENTATION, PAPULAR AND VESICULAR ERUPTIONS, ULCERATION, AND  
DEQUAMATION. PHOTSENSITIZATION OCCURS, ESPECIALLY IN FAIR-SKINNED PERSONS  
PROLONGED CONTACT MAY CAUSE BURNS. IT IS READILY ABSORBED THROUGH THE SKIN  
AND MAY CAUSE SYSTEMIC ILLNESS WITH SALIVATION, VOMITING, HEADACHE,  
THREADY PULSE, RESPIRATORY DIFFICULTIES, LOSS OF PUPILLARY REFLEXES,  
HYPOTHERMIA, MILD CONVULSIONS, AND CYANOSIS. DEPRESSION, WEAKNESS, SLIGHT  
CONFUSION, NAUSEA, AND VERTIGO WERE ALSO REPORTED FROM ONE STUDY IN WHICH  
IT WAS NOT CLEAR WHETHER THE ROUTE OF EXPOSURE WAS INHALATION OR SKIN  
CONTACT OR BOTH.

CHRONIC EXPOSURE- REPEATED OR PROLONGED EXPOSURE MAY CAUSE DARKENING OF THE  
SKIN AND DERMATITIS. IF SUFFICIENT AMOUNTS ARE ABSORBED, SYSTEMIC SYMPTOMS  
AS WITH ACUTE EXPOSURE MAY OCCUR. FIVE CREOSOTES OR CREOSOTE OILS PRODUCED  
SKIN TUMORS WHEN APPLIED TO THE SKIN OF MICE; ONE ALSO PRODUCED LUNG  
TUMORS. HUMAN MORTALITY ANALYSIS OF CREOSOTE-EXPOSED BRICKMAKERS INDICATED  
INCREASED RISK OF MORTALITY FROM SCROTAL CANCER. MALIGNANT EPITHELIOMAS,  
ABOUT ONE-THIRD OF WHICH WERE SCROTAL, HAVE BEEN REPORTED IN SEVERAL CASE  
REPORTS OF WORKERS EXPOSED TO CREOSOTE.

FIRST AID- REMOVE CONTAMINATED CLOTHING AND SHOES IMMEDIATELY. WASH AFFECTED  
AREA WITH SOAP OR MILD DETERGENT AND LARGE AMOUNTS OF WATER UNTIL NO  
EVIDENCE OF CHEMICAL REMAINS (APPROXIMATELY 15-20 MINUTES).

COAL TAR CREOSOTE:  
CORROSIVE.

ACUTE EXPOSURE- LIQUID CONTACT HAS CAUSED PAINFUL PROTRACTED KERATOCONJUNCTIVITIS INVOLVING LOSS OF CORNEAL EPITHELIUM, CLOUDING OF THE CORNEA, MIOSIS AND LONG-LASTING IRRITABILITY AND PHOTOPHOBIA. OTHER SYMPTOMS WHICH HAVE BEEN REPORTED FROM EXPOSURE TO CREOSOTE-TREATED

PARTICLES INCLUDE ABRASION OF THE CORNEA WITH SOME PERMANENT SCARRING, HYPEREMIA, AND PROMINENT SEROUS SECRETION.

CHRONIC EXPOSURE- REPEATED OR PROLONGED EXPOSURE MAY CAUSE CONJUNCTIVITIS.

FIRST AID- WASH EYES IMMEDIATELY WITH LARGE AMOUNTS OF WATER, OCCASIONALLY LIFTING UPPER AND LOWER LIDS, UNTIL NO EVIDENCE OF CHEMICAL REMAINS (APPROXIMATELY 15-20 MINUTES). GET MEDICAL ATTENTION IMMEDIATELY.

INGESTION:

COAL TAR CREOSOTE:

ACUTE EXPOSURE- HAS CAUSED INTENSE IRRITATION AND CONGESTION OF THE ENTIRE GASTROINTESTINE TRACT, SALIVATION, VOMITING, RESPIRATORY DIFFICULTIES, THREADY PULSE, VERTIGO, HEADACHE, LOSS OF PUPILLARY REFLEXES, HYPOTHERMIA, CYANOSIS AND MILD CONVULSIONS MAY ALSO OCCUR. DEATH FROM LARGE DOSES APPEARS LARGELY DUE TO CARDIOVASCULAR COLLAPSE.

CHRONIC EXPOSURE- REPEATED INGESTION OF SMALL DOSES MAY RESULT IN CHRONIC INTOXICATION CHARACTERIZED BY DISTURBANCES OF VISION AND DIGESTION INCLUDING INCREASED PERISTALSIS AND BLOODY STOOLS. IN ONE CASE, HYPERTENSION AND GENERAL CARDIOVASCULAR COLLAPSE WERE REPORTED. OTHER SYMPTOMS OF ACUTE EXPOSURE ARE ALSO POSSIBLE. PATERNAL REPRODUCTIVE EFFECTS HAVE BEEN REPORTED IN RATS AND MICE FOLLOWING REPEATED EXPOSURES PRIOR TO MATING.

FIRST AID- IF THE PATIENT IS ALERT AND ABLE TO SWALLOW, GIVE A SLURRY OF ACTIVATED CHARCOAL IN WATER. DO NOT GIVE EMETICS. CAREFUL GASTRIC LAVAGE WITH WATER IS RECOMMENDED IF THERE ARE NO DEEP BURNS IN THE MOUTH OR PHARYNX. OLDER RECOMMENDATIONS TO LAVAGE WITH OLIVE OR OTHER VEGETABLE OILS DO NOT APPEAR TO BE SUBSTANTIATED. IN ANY CASE AVOID MINERAL OIL AND ALCOHOL. (GOSSELIN, CLINICAL TOXICOLOGY OF COMMERCIAL PRODUCTS, 5TH ED.), LAVAGE MUST BE PERFORMED BY QUALIFIED MEDICAL

ANTIDOTE:

NO SPECIFIC ANTIDOTE. TREAT SYMPTOMATICALLY AND SUPPORTIVELY.

#### REACTIVITY

REACTIVITY:

STABLE UNDER NORMAL TEMPERATURES AND PRESSURES.

INCOMPATIBILITIES:

COAL TAR CREOSOTE:

CHLOROSULFONIC ACID: MIXING IN CLOSED CONTAINER RESULTS IN INCREASED TEMPERATURE AND PRESSURE.

STRONG OXIDIZERS: POSSIBLE VIOLENT REACTION.

DECOMPOSITION:

THERMAL DECOMPOSITION PRODUCTS MAY INCLUDE TOXIC OXIDES OF CARBON.

POLYMERIZATION:

HAZARDOUS POLYMERIZATION HAS NOT BEEN REPORTED TO OCCUR UNDER NORMAL TEMPERATURES AND PRESSURES.

#### STORAGE AND DISPOSAL

OBSERVE ALL FEDERAL, STATE AND LOCAL REGULATIONS WHEN STORING OR DISPOSING OF THIS SUBSTANCE.

#### \*\*STORAGE\*\*

STORE IN ACCORDANCE WITH 29 CFR 1910.106.

STORE AWAY FROM INCOMPATIBLE SUBSTANCES.

BONDING AND GROUNDING: SUBSTANCES WITH LOW ELECTROCONDUCTIVITY, WHICH MAY BE IGNITED BY ELECTROSTATIC SPARKS, SHOULD BE STORED IN CONTAINERS WHICH MEET THE BONDING AND GROUNDING GUIDELINES SPECIFIED IN NFPA 77-1983, RECOMMENDED PRACTICE ON STATIC ELECTRICITY.



DISPOSAL MUST BE IN ACCORDANCE WITH STANDARDS APPLICABLE TO  
GENERATORS OF HAZARDOUS WASTE, 40CFR 262. EPA HAZARDOUS WASTE NUMBER U051.

\*\*\*\*\*  
CONDITIONS TO AVOID  
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MAY BE IGNITED BY HEAT, SPARKS OR FLAMES. VAPORS MAY TRAVEL TO A SOURCE OF  
IGNITION AND FLASH BACK. CONTAINER MAY EXPLODE IN HEAT OF FIRE. VAPOR  
EXPLOSION HAZARD INDOORS, OUTDOORS OR IN SEWERS. RUNOFF TO SEWER MAY CREATE  
FIRE OR EXPLOSION HAZARD.

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SPILL AND LEAK PROCEDURES  
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OCCUPATIONAL SPILL:

SHUT OFF IGNITION SOURCES. STOP LEAK IF YOU CAN DO IT WITHOUT RISK. USE WATER  
SPRAY TO REDUCE VAPORS. FOR SMALL SPILLS, TAKE UP WITH SAND OR OTHER ABSORBENT  
MATERIAL AND PLACE INTO CONTAINERS FOR LATER DISPOSAL. FOR LARGER SPILLS, DIKE  
FAR AHEAD OF SPILL FOR LATER DISPOSAL. NO SMOKING, FLAMES OR FLARES IN HAZARD  
AREA. KEEP UNNECESSARY PEOPLE AWAY; ISOLATE HAZARD AREA AND RESTRICT ENTRY.  
REPORTABLE QUANTITY (RQ): 1 POUND

THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) SECTION 304 REQUIRES  
THAT A RELEASE EQUAL TO OR GREATER THAN THE REPORTABLE QUANTITY FOR THIS  
SUBSTANCE BE IMMEDIATELY REPORTED TO THE LOCAL EMERGENCY PLANNING COMMITTEE  
AND THE STATE EMERGENCY RESPONSE COMMISSION (40 CFR 355.40). IF THE RELEASE OR  
THIS SUBSTANCE IS REPORTABLE UNDER CERCLA SECTION 103, THE NATIONAL RESPONSE  
CENTER MUST BE NOTIFIED IMMEDIATELY AT (800) 424-8802 OR (202) 426-2675 IN THE  
METROPOLITAN WASHINGTON, D.C. AREA (40 CFR 302.6).

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PROTECTIVE EQUIPMENT  
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VENTILATION:

PROVIDE LOCAL EXHAUST VENTILATION SYSTEM TO MEET PUBLISHED EXPOSURE LIMITS.  
RESPIRATOR:

THE FOLLOWING RESPIRATORS AND MAXIMUM USE CONCENTRATIONS ARE RECOMMENDATIONS  
BY THE U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, NIOSH POCKET GUIDE TO  
CHEMICAL HAZARDS OR NIOSH CRITERIA DOCUMENTS; OR DEPARTMENT OF LABOR,  
29CFR1910 SUBPART Z.

THE SPECIFIC RESPIRATOR SELECTED MUST BE BASED ON CONTAMINATION LEVELS FOUND  
IN THE WORK PLACE AND BE JOINTLY APPROVED BY THE NATIONAL INSTITUTE OF  
OCCUPATIONAL SAFETY AND HEALTH AND THE MINE SAFETY AND HEALTH ADMINISTRATION.  
AT ANY DETECTABLE CONCENTRATION:

SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN  
PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE.

SUPPLIED-AIR RESPIRATOR WITH FULL FACEPIECE OPERATED IN  
PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE IN COMBINATION WITH  
AN AUXILIARY SELF-CONTAINED BREATHING APPARATUS OPERATED IN  
PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE.

ESCAPE-AIR-PURIFYING FULL FACEPIECE RESPIRATOR (GAS MASK) WITH A CHIN-STYLE  
OR FRONT- OR BACK-MOUNTED ORGANIC VAPOR CANISTER HAVING A  
HIGH-EFFICIENCY PARTICULATE FILTER.

ESCAPE-TYPE SELF-CONTAINED BREATHING APPARATUS.

FOR FIREFIGHTING AND OTHER IMMEDIATELY DANGEROUS TO LIFE OR HEALTH CONDITIONS:  
SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN PRESSURE  
DEMAND OR OTHER POSITIVE PRESSURE MODE.

SUPPLIED-AIR RESPIRATOR WITH FULL FACEPIECE AND OPERATED IN PRESSURE-DEMAND  
OR OTHER POSITIVE PRESSURE MODE IN COMBINATION WITH AN AUXILIARY  
SELF-CONTAINED BREATHING APPARATUS OPERATED IN PRESSURE-DEMAND OR OTHER  
POSITIVE PRESSURE MODE.

CLOTHING:

EMPLOYEE MUST WEAR APPROPRIATE PROTECTIVE (IMPERVIOUS) CLOTHING AND EQUIPMENT  
TO PREVENT ANY POSSIBILITY OF SKIN CONTACT WITH THIS SUBSTANCE.  
GLOVES:

EMPLOYEE MUST WEAR APPROPRIATE PROTECTIVE GLOVES TO PREVENT CONTACT WITH THIS  
SUBSTANCE.

EMPLOYEE MUST WEAR SPECIAL PROOF OR DUST-RESISTANT SAFETY GOGGLES AND A  
FACESHIELD TO PREVENT CONTACT WITH THIS SUBSTANCE.  
WHERE THERE IS ANY POSSIBILITY THAT AN EMPLOYEE'S EYES MAY BE EXPOSED TO  
THIS SUBSTANCE, THE EMPLOYER SHALL PROVIDE AN EYE-WASH FOUNTAIN WITHIN THE  
IMMEDIATE WORK AREA FOR EMERGENCY USE.

CREATION DATE: 02/14/86

REVISION DATE: 03/17/86

\*\*END OF DOCUMENT REACHED\*\*

ITEM 2

8021-39-4

WOOD CREOSOTE

CREASOTE; CREOSOTE; WOOD; DHS71221

CHEMICAL FAMILY:

MIXTURE

CERCLA RATINGS (SCALE 0-3): HEALTH=3 FIRE=2 REACTIVITY=0 PERSISTENCE=1

NFPA RATINGS (SCALE 0-4): HEALTH=2 FIRE=2 REACTIVITY=0

COMPONENTS AND CONTAMINANTS

COMPONENT: WOOD CREOSOTE

PERCENT: 100.0

OTHER CONTAMINANTS: NONE

EXPOSURE LIMITS:

COAL TAR PITCH VOLATILES (POLYCYCLIC AROMATIC HYDROCARBONS):

0.2 MG/M3 OSHA TWA (AS BENZENE SOLUBLES)

0.2 MG/M3 ACGIH TWA (AS BENZENE SOLUBLES)

ACGIH A1-CONFIRMED HUMAN CARCINOGEN.

0.1 MG/M3 NIOSH RECOMMENDED 10 HOUR TWA (CYCLOHEXANE-EXTRACTABLE FRACTION)

PHYSICAL DATA

DESCRIPTION: ALMOST COLORLESS TO BROWN, OILY LIQUID WITH A CHARACTERISTIC  
SMOKY ODOR AND CAUSTIC, BURNING TASTE BOILING POINT: 195-400 F (383-752 C)

SPECIFIC GRAVITY:

1.076 EVAPORATION RATE: NOT AVAILABLE

SOLUBILITY IN WATER: SLIGHTLY SOLUBLE

SOLVENT SOLUBILITY: SOLUBLE IN GLYCEROL, GLACIAL ACETIC ACID, FIXED  
ALKALI HYDROXIDE SOLUTIONS, ALCOHOL, CHLOROFORM, ETHER, OILS

FIRE AND EXPLOSION DATA

FIRE AND EXPLOSION HAZARD:

MODERATE FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME.

FLASH POINT: 165 F (73 C) AUTOIGNITION TEMP.: 637 F (336 C)

FLAMMABILITY CLASS(OSHA): IIIA

FIREFIGHTING MEDIA:

DRY CHEMICAL, CARBON DIOXIDE, WATER SPRAY OR FOAM

(1984 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.3).

FOR LARGER FIRES, USE WATER SPRAY, FOG OR FOAM

(1984 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.3).

FIREFIGHTING:

MOVE CONTAINER FROM FIRE AREA IF POSSIBLE. COOL FIRE-EXPOSED CONTAINERS WITH  
WATER FROM SIDE UNTIL WELL AFTER FIRE IS OUT. FOR MASSIVE FIRE IN STORAGE  
AREA, USE UNMANNED HOSE HOLDER OR MONITOR NOZZLES, ELSE WITHDRAW FROM AREA  
AND LET FIRE BURN. WITHDRAW IMMEDIATELY IN CASE OF RISING SOUND FROM VENTING  
SAFETY DEVICE OR ANY DISCOLORATION OF STORAGE TANK DUE TO FIRE (1984 EMERGENC  
RESPONSE GUIDEBOOK, DOT P 5800.3, GUIDE PAGE 27).

EXTINGUISH ONLY IF FLOW CAN BE STOPPED; USE FLOODING AMOUNTS OF WATER AS A  
FOG, SOLID STREAMS MAY BE INEFFECTIVE. COOL CONTAINERS WITH FLOODING  
AMOUNTS OF WATER; APPLY FROM AS FAR A DISTANCE AS POSSIBLE. AVOID BREATHING  
VAPORS, KEEP UPWIND.

TRANSPORTATION DATA

COMBUSTIBLE LIQUID

DEPARTMENT OF TRANSPORTATION LABELING REQUIREMENTS: 49CFR172.101 AND 172.402: NONE

DEPARTMENT OF TRANSPORTATION PACKAGING REQUIREMENTS: NONE  
EXCEPTIONS: 49CFR173.118A

#### TOXICITY

WOOD CREOSOTE:

REPRODUCTIVE EFFECTS DATA (RTECS).

CARCINOGEN STATUS: KNOWN HUMAN CARCINOGEN (NTP) (SOOTS, TARS, MINERAL OILS).  
THERE IS SUFFICIENT EVIDENCE THAT SOOTS, TARS, AND SOME MINERAL OILS ARE

CARCINOGENIC IN HUMANS AND IN EXPERIMENTAL ANIMALS.

WOOD CREOSOTE IS A MUCOUS MEMBRANE IRRITANT, AND A SEVERE SKIN AND EYE IRRITANT.

#### HEALTH EFFECTS / FIRST AID

INHALATION:

WOOD CREOSOTE:  
IRRITANT.

ACUTE EXPOSURE- MAY CAUSE MODERATE RESPIRATORY TRACT IRRITATION. IN ONE STUDY OF WORKERS WHO DEVELOPED CREOSOTE BURNS, A SMALL PERCENT ALSO COMPLAINED OF DEPRESSION, WEAKNESS, SEVERE HEADACHE, SLIGHT CONFUSION, VERTIGO, SALIVATION, AND NAUSEA. IT IS UNCLEAR WHETHER THE ROUTE OF EXPOSURE WAS SKIN CONTACT OR INHALATION OR BOTH.

CHRONIC EXPOSURE- A STUDY OF WORKERS SPRAYING WARMED CREOSOTE WITH CONCENTRATIONS UP TO 0.01 MG/L REPORTED HEADACHES, GIDDINESS, NAUSEA, VOMITING, AND SALIVATION.

FIRST AID- REMOVE FROM EXPOSURE AREA TO FRESH AIR IMMEDIATELY. IF BREATHING HAS STOPPED, PERFORM ARTIFICIAL RESPIRATION. KEEP PERSON WARM AND AT REST. GET MEDICAL ATTENTION IMMEDIATELY.

SKIN CONTACT:

WOOD CREOSOTE:

CORROSIVE/CARCINOGEN.

ACUTE EXPOSURE- THE LIQUID AND VAPORS ARE STRONG IRRITANTS AND MAY CAUSE A BURNING SENSATION, ITCHING, LOCAL ERYTHEMA PROGRESSING TO A BRONZE PIGMENTATION, PAPULAR AND VESICULAR ERUPTIONS, ULCERATION, AND DEQUAMATION. PHOTSENSITIZATION OCCURS, ESPECIALLY IN FAIR-SKINNED PERSONS. PROLONGED CONTACT MAY CAUSE BURNS. IT IS READILY ABSORBED THROUGH THE SKIN AND MAY CAUSE SYSTEMIC ILLNESS WITH SALIVATION, VOMITING, HEADACHE, THREADY PULSE, RESPIRATORY DIFFICULTIES, LOSS OF PUPILLARY REFLEXES, HYPOTHERMIA, MILD CONVULSIONS, AND CYANOSIS. DEPRESSION, WEAKNESS, SLIGHT CONFUSION, NAUSEA, AND VERTIGO WERE ALSO REPORTED FROM ONE STUDY IN WHICH IT WAS NOT CLEAR WHETHER THE ROUTE OF EXPOSURE WAS INHALATION OR SKIN CONTACT OR BOTH.

CHRONIC EXPOSURE- REPEATED OR PROLONGED EXPOSURE MAY CAUSE DARKENING OF THE SKIN AND DERMATITIS. IF SUFFICIENT AMOUNTS ARE ABSORBED, SYSTEMIC SYMPTOMS AS WITH ACUTE EXPOSURE MAY OCCUR. FIVE CREOSOTES OR CREOSOTE OILS PRODUCED SKIN TUMORS WHEN APPLIED TO THE SKIN OF MICE; ONE ALSO PRODUCED LUNG TUMORS. HUMAN MORTALITY ANALYSIS OF CREOSOTE-EXPOSED BRICKMAKERS INDICATED INCREASED RISK OF MORTALITY FROM SCROTAL CANCER. MALIGNANT EPITHELIOMAS, ABOUT ONE-THIRD OF WHICH WERE SCROTAL, HAVE BEEN REPORTED IN SEVERAL CASE REPORTS OF WORKERS EXPOSED TO CREOSOTE.

FIRST AID- REMOVE CONTAMINATED CLOTHING AND SHOES IMMEDIATELY. WASH AFFECTED AREA WITH SOAP OR MILD DETERGENT AND LARGE AMOUNTS OF WATER UNTIL NO EVIDENCE OF CHEMICAL REMAINS (AT LEAST 15-20 MINUTES). IN CASE OF CHEMICAL BURNS, COVER AREA WITH STERILE, DRY DRESSING. BANDAGE SECURELY, BUT NOT TOO TIGHTLY. GET MEDICAL ATTENTION IMMEDIATELY.

EYE CONTACT:

WOOD CREOSOTE:

CORROSIVE.

ACUTE EXPOSURE- LIQUID CONTACT HAS CAUSED PAINFUL CONTRACTIONS.



OF THE CORNEA, MISTIS AND LONG-LASTING IRRITABILITY AND PHOTOPHOBIA.  
OTHER SYMPTOMS WHICH HAVE BEEN REPORTED FROM EXPOSURE TO CREOSOTE-TREATED  
PARTICLES INCLUDE ABRASION OF THE CORNEA WITH SOME PERMANENT SCARRING,  
HYPEREMIA, AND PRONOUNCED SEROUS SECRETION.

CHRONIC EXPOSURE- REPEATED OR PROLONGED EXPOSURE MAY CAUSE CONJUNCTIVITIS.  
FIRST AID- WASH EYES IMMEDIATELY WITH LARGE AMOUNTS OF WATER, OCCASIONALLY  
LIFTING UPPER AND LOWER LIDS, UNTIL NO EVIDENCE OF CHEMICAL REMAINS  
(AT LEAST 15-20 MINUTES). IN CASE OF BURNS, APPLY STERILE BANDAGES LOOSELY  
WITHOUT MEDICATION. GET MEDICAL ATTENTION IMMEDIATELY.

INGESTION:

WOOD CREOSOTE:

ACUTE EXPOSURE- HAS CAUSED INTENSE IRRITATION AND CONGESTION OF THE ENTIRE

GASTROINTESTINE TRACT. SALIVATION, VOMITING, RESPIRATORY DIFFICULTIES,  
THREADY PULSE, VERTIGO, HEADACHE, LOSS OF PUPILLARY REFLEXES, HYPOTHERMIA,  
CYANOSIS AND MILD CONVULSIONS MAY ALSO OCCUR. DEATH FROM LARGE DOSES  
APPEARS LARGELY DUE TO CARDIOVASCULAR COLLAPSE.

CHRONIC EXPOSURE- REPEATED INGESTION OF SMALL DOSES MAY RESULT IN CHRONIC  
INTOXICATION CHARACTERIZED BY DISTURBANCES OF VISION AND DIGESTION  
INCLUDING INCREASED PERISTALSIS AND BLOODY STOOLS. IN ONE CASE,  
HYPERTENSION AND GENERAL CARDIOVASCULAR COLLAPSE WERE REPORTED. OTHER  
SYMPTOMS OF ACUTE EXPOSURE ARE ALSO POSSIBLE. MATERNAL REPRODUCTIVE  
EFFECTS HAVE BEEN REPORTED IN MICE FOLLOWING REPEATED EXPOSURES PRIOR TO  
MATING. PATERNAL REPRODUCTIVE EFFECTS HAVE BEEN REPORTED IN MICE AND RATS  
FOLLOWING REPEATED EXPOSURES PRIOR TO MATING.

FIRST AID- IF THE PATIENT IS ALERT AND ABLE TO SWALLOW, GIVE A SLURRY OF  
ACTIVATED CHARCOAL IN WATER. DO NOT GIVE EMETICS. CAREFUL GASTRIC LAVAGE  
WITH WATER IS RECOMMENDED IF THERE ARE NO DEEP BURNS IN THE MOUTH OR  
PHARYNX. OLDER RECOMMENDATIONS TO LAVAGE WITH OLIVE OR OTHER VEGETABLE OILS  
DO NOT APPEAR TO BE SUBSTANTIATED. IN ANY CASE AVOID MINERAL OIL AND  
ALCOHOL. (GOSSELIN, CLINICAL TOXICOLOGY OF COMMERCIAL PRODUCTS, 5TH ED.).  
LAVAGE MUST BE PERFORMED BY QUALIFIED MEDICAL

ANTIDOTE:

NO SPECIFIC ANTIDOTE. TREAT SYMPTOMATICALLY AND SUPPORTIVELY.

#### REACTIVITY

REACTIVITY:

STABLE UNDER NORMAL TEMPERATURES AND PRESSURES.

INCOMPATIBILITIES:

WOOD CREOSOTE:

ACACIA: INCOMPATIBLE.

ALBUMIN: INCOMPATIBLE.

CHLOROSULFONIC ACID: INCREASE IN TEMPERATURE AND PRESSURE WHEN MIXED IN  
CLOSED CONTAINER.

CUPRIC SALTS: INCOMPATIBLE.

FERRIC SALTS: INCOMPATIBLE.

GOLD SALTS: INCOMPATIBLE.

OXIDIZERS: FIRE AND EXPLOSION HAZARD.

SILVER SALTS: INCOMPATIBLE.

DECOMPOSITION:

THERMAL DECOMPOSITION PRODUCTS MAY INCLUDE TOXIC OXIDES OF CARBON.

POLYMERIZATION:

HAZARDOUS POLYMERIZATION HAS NOT BEEN REPORTED TO OCCUR UNDER NORMAL  
TEMPERATURES AND PRESSURES.

#### STORAGE AND DISPOSAL

OBSERVE ALL FEDERAL, STATE AND LOCAL REGULATIONS WHEN STORING OR DISPOSING  
OF THIS SUBSTANCE.

##STORAGE##

STORE IN ACCORDANCE WITH 29 CFR 1910.106.

BONDING AND GROUNDING- SUBSTANCES WITH LOW ELECTROCONDUCTIVITY, WHICH  
MAY BE IGNITED BY ELECTROSTATIC SPARKS, SHOULD BE STORED IN CONTAINERS



RECOMMENDED PRACTICE ON STATIC ELECTRICITY.

STORE AWAY FROM INCOMPATIBLE SUBSTANCES.

**\*\*DISPOSAL\*\***

DISPOSAL MUST BE IN ACCORDANCE WITH STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE, 40CFR 262. EPA HAZARDOUS WASTE NUMBER U051.

\*\*\*\*\*

**CONDITIONS TO AVOID**

MAY BE IGNITED BY HEAT, SPARKS OR FLAMES. VAPORS MAY TRAVEL TO A SOURCE OF IGNITION AND FLASH BACK. CONTAINER MAY EXPLODE IN HEAT OF FIRE. VAPOR EXPLOSION HAZARD INDOORS, OUTDOORS OR IN SEWERS. RUNOFF TO SEWER MAY CREATE FIRE OR EXPLOSION HAZARD.

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**SPILL AND LEAK PROCEDURES**

**OCCUPATIONAL SPILL:**

SHUT OFF IGNITION SOURCES. STOP LEAK IF YOU CAN DO IT WITHOUT RISK. USE WATER SPRAY TO REDUCE VAPORS. FOR SMALL SPILLS, TAKE UP WITH SAND OR OTHER ABSORBENT MATERIAL AND PLACE INTO CONTAINERS FOR LATER DISPOSAL. FOR LARGER SPILLS, DIKE FAR AHEAD OF SPILL FOR LATER DISPOSAL. NO SMOKING, FLAMES OR FLARES IN HAZARD AREA. KEEP UNNECESSARY PEOPLE AWAY. ISOLATE HAZARD AREA AND RESTRICT ENTRY.

**PROTECTIVE EQUIPMENT**

**VENTILATION:**

PROVIDE LOCAL EXHAUST OR PROCESS ENCLOSURE VENTILATION SYSTEM.

**RESPIRATOR:**

THE SPECIFIC RESPIRATOR SELECTED MUST BE BASED ON THE CONTAMINATION LEVELS FOUND IN THE WORK PLACE, MUST NOT EXCEED THE WORKING LIMITS OF THE RESPIRATOR AND BE JOINTLY APPROVED BY THE NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH AND THE MINE SAFETY AND HEALTH ADMINISTRATION.

THE FOLLOWING RESPIRATORS ARE RECOMMENDED BASED ON THE DATA FOUND IN THE PHYSICAL DATA, HEALTH EFFECTS AND TOXICITY SECTIONS. THEY ARE RANKED IN ORDER FROM MINIMUM TO MAXIMUM RESPIRATORY PROTECTION:

TYPE 'C' SUPPLIED-AIR RESPIRATOR WITH A FULL FACEPIECE OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE OR WITH A FULL FACEPIECE, HELMET OR HOOD OPERATED IN CONTINUOUS-FLOW MODE.

SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE.

FOR FIREFIGHTING AND OTHER IMMEDIATELY DANGEROUS TO LIFE OR HEALTH CONDITIONS: SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE.

SUPPLIED-AIR RESPIRATOR WITH FULL FACEPIECE AND OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE IN COMBINATION WITH AN AUXILIARY

SELF-CONTAINED BREATHING APPARATUS OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE.

**CLOTHING:**

EMPLOYEE MUST WEAR APPROPRIATE PROTECTIVE (IMPERVIOUS) CLOTHING AND EQUIPMENT TO PREVENT ANY POSSIBILITY OF SKIN CONTACT WITH THIS SUBSTANCE.

**GLOVES:**

EMPLOYEE MUST WEAR APPROPRIATE PROTECTIVE GLOVES TO PREVENT CONTACT WITH THIS SUBSTANCE.

**EYE PROTECTION:**

EMPLOYEE MUST WEAR SPLASH-PROOF OR DUST-RESISTANT SAFETY GOGGLES AND A FACESHIELD TO PREVENT CONTACT WITH THIS SUBSTANCE.

WHERE THERE IS ANY POSSIBILITY THAT AN EMPLOYEE'S EYES MAY BE EXPOSED TO THIS SUBSTANCE, THE EMPLOYER SHALL PROVIDE AN EYE-WASH FOUNTAIN WITHIN THE IMMEDIATE WORK AREA FOR EMERGENCY USE.

CREATION DATE: 02/22/88

REVISION DATE: 03/17/88

\*\*END OF DOCUMENT REACHED\*\*

ITEM 3

WOOD DUST: PEATED WITH CREOSOTE  
01/88905

CERCLA RATINGS (SCALE 0-3): HEALTH=3 FIRE=3 REACTIVITY=0 PERSISTENCE=0  
NFPA RATINGS (SCALE 0-4): HEALTH=3 FIRE=3 REACTIVITY=0

#### COMPONENTS AND CONTAMINANTS

COMPONENT: WOOD DUST PERCENT: 99.0  
COMPONENT: WOOD CREOSOTE PERCENT:  
1.0

CAS# 8021-39-4 AND/OR

COMPONENT: COAL TAR CREOSOTE PERCENT:  
1.0

CAS# 8001-58-9

EXPOSURE LIMITS:

#### WOOD DUST:

1 MG(HARD WOOD)/M3 ACGIH TWA.

5 MG(SOFT WOOD)/M3 ACGIH TWA; 10 MG(SOFT WOOD)/M3 ACGIH STEL

COAL TAR CREOSOTE AS COAL TAR PITCH VOLATILES:

0.2 MG/M3 OSHA TWA (AS BENZENE SOLUBLES)

0.2 MG/M3 ACGIH TWA (AS BENZENE SOLUBLES)

ACGIH A1-CONFIRMED HUMAN CARCINOGEN.

0.1 MG/M3 NIOSH RECOMMENDED 10 HOUR TWA (CYCLOHEXANE-EXTRACTABLE FRACTION)

1 POUND CERCLA SECTION 103 REPORTABLE QUANTITY

#### PHYSICAL DATA

DESCRIPTION: DUST OF VARYING SIZE, COLOR, TEXTURE AND ODOR

#### FIRE AND EXPLOSION DATA

FIRE AND EXPLOSION HAZARD:

THE FINELY DIVIDED WOOD DUST PRESENTS A DANGEROUS FIRE AND EXPLOSION HAZARD  
WHEN EXPOSED TO HEAT OR FLAME.

THE LARGER DUSTS PRESENT A MODERATE TO DANGEROUS FIRE AND EXPLOSION HAZARD  
WHEN EXPOSED TO HEAT OR FLAME.

FIREFIGHTING MEDIA:

DRY CHEMICAL, CARBON DIOXIDE, WATER SPRAY OR FOAM

(1984 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.3).

FOR LARGER FIRES, USE WATER SPRAY, FOG OR FOAM

(1984 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.3).

FIREFIGHTING:

MOVE CONTAINER FROM FIRE AREA IF POSSIBLE. DO NOT SCATTER SPILLED MATERIAL

WITH MORE WATER THAN NEEDED FOR FIRE CONTROL. DIKE FIRE CONTROL WATER FOR

LATER DISPOSAL (1984 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.3, GUIDE  
PAGE 31).

USE AGENTS SUITABLE FOR TYPE OF SURROUNDING FIRE. AVOID BREATHING HAZARDOUS  
VAPORS, KEEP UPWIND.

#### TOXICITY

WOOD DUST:

CARCINOGEN STATUS: KNOWN HUMAN CARCINOGEN (NTP) (FURNITURE AND CABINET-MAKING  
INDUSTRY); HUMAN SUFFICIENT EVIDENCE (IARC) (CARPENTRY AND JOINERY (CERTAIN  
EXPOSURES)); FURNITURE MANUFACTURE; LUMBER AND SAWMILL INDUSTRY; PULP AND PAPER  
MANUFACTURE). AN EXCESS RISK OF NASAL ADENOCARCINOMAS HAS BEEN REPORTED IN  
WORKERS IN THESE INDUSTRIES. THIS EXCESS RISK OCCURS MAINLY WITH THOSE EXPOSED  
TO WOOD DUSTS. SOME STUDIES HAVE SUGGESTED THAT THE INCIDENCE OF NASAL CANCERS  
AND HODGKIN'S MAY BE INCREASED IN THE LUMBER AND SAW MILL (LOGGING INCLUDED),  
CARPENTRY AND JOINERY TRADES AND THE PULP AND PAPER INDUSTRIES.

WOOD DUST IS AN EYE, SKIN AND MUCOUS MEMBRANE IRRITANT AND A PULMONARY  
SENSITIZER.

WOOD CREOSOTE:

REPRODUCTIVE EFFECTS DATA (RTECS).

CARCINOGEN STATUS: KNOWN HUMAN CARCINOGEN (NTP) (SOOTS, TARS, MINERAL OILS)

CARCINOGENIC IN HUMANS AND IN EXPERIMENTAL ANIMALS.

WOOD CREOSOTE IS A MUCOUS MEMBRANE IRRITANT, AND SEVERE SKIN AND EYE IRRITANT.

COAL TAR CREOSOTE:

725 MG/KG ORAL-RAT LD50; 433 MG/KG ORAL-MOUSE LD50; 600 MG/KG ORAL-DOG LDLO; 600 MG/KG ORAL-RABBIT LDLO; 700 MG/KG ORAL-CAT LDLO; MUTAGENIC DATA (RTECS); REPRODUCTIVE EFFECTS DATA (RTECS); TUMORIGENIC DATA (RTECS).

CARCINOGEN STATUS: KNOWN HUMAN CARCINOGEN (NTP) (SOOTS, TARS, MINERAL OILS); ANIMAL SUFFICIENT EVIDENCE (IARC); HUMAN LIMITED EVIDENCE (IARC). THERE IS SUFFICIENT EVIDENCE FOR THE CARCINOGENICITY IN EXPERIMENTAL ANIMALS OF CREOSOTE OILS AND LIMITED EVIDENCE THAT COAL-TAR DERIVED CREOSOTES ARE CARCINOGENIC IN HUMANS.

COAL TAR CREOSOTE IS A MUCOUS MEMBRANE IRRITANT, AND A SEVERE SKIN AND EYE IRRITANT.

#### HEALTH EFFECTS AND FIRST AID

INHALATION:

WOOD DUST:

IRRITANT/SENSITIZER/CARCINOGEN.

ACUTE EXPOSURE- DEPENDING UPON THE SPECIES OF TREE, INHALATION OF WOOD DUST MAY CAUSE SYMPTOMS RANGING FROM SNEEZING, COUGHING, RHINORRHEA, FEVER, MUSCULAR ACHES AND PAIN, LABORED BREATHING, NASO-PHARYNGITIS, LARYNGITIS AND BRONCHITIS. SOME WOOD DUSTS MAY CAUSE SINUS INFLAMMATION AND NOSE BLEEDS. THESE SYMPTOMS HAVE BEEN ATTRIBUTED TO AN ALLERGIC TYPE REACTION AND MAY BEAR TO BE VERY SPECIES SPECIFIC. PULMONARY SENSITIZATION TO SPECIFIC SPECIES HAS BEEN DOCUMENTED. HYPERSENSITIVITY PNEUMONITIS OR EXTRINSIC ALLERGIC ALVEOLITIS MAY ALSO OCCUR AMONG INDIVIDUALS THAT ARE SUSCEPTIBLE TO THE WOOD DUST. STUDIES HAVE SHOWN THAT THIS CONDITION MAY BE CAUSED BY THE WOOD DUST ITSELF. THERE IS THE POSSIBILITY THAT MICROORGANISMS, THAT INHABIT THE WOOD, MAY ALSO BE RESPONSIBLE FOR CAUSING THIS CONDITION IN SOME INDIVIDUALS. MANY OF THE MORE EXOTIC WOODS HAVE BEEN REPORTED TO CAUSE NAUSEA AND VOMITING FOLLOWING INHALATION. MANY OF THESE WOODS ARE ALSO REPORTED TO CAUSE DIZZINESS, GIDDINESS AND CARDIAC ARRHYTHMIAS.

CHRONIC EXPOSURE- REPEATED OR PROLONGED EXPOSURE MAY RESULT IN ASTHMAS AND OR RHINITIS. STUDIES HAVE SHOWN THAT OCCUPATIONAL ASTHMA IS THE RESULT OF IRRITATION OF THE DUST. MANY WOODS ARE COMPOSED OF BIOLOGICALLY ACTIVE CHEMICAL AGENTS AND THESE AGENTS MAY PLAY A ROLE IN CAUSING THE ASTHMAS. CASES OF PULMONARY FIBROSIS HAVE BEEN REPORTED IN INDIVIDUALS WITH LONG TERM EXPOSURE TO WOOD DUST. NASAL CARCINOMAS, ESPECIALLY ADENOCARCINOMA, HAS BEEN DOCUMENTED IN WORKERS IN THE FURNITURE AND CABINET-MAKING INDUSTRIES. THIS EXCESS RISK OCCURS MAINLY IN THOSE EXPOSED TO WOOD DUST. AN INCREASE IN HODGKIN'S DISEASE HAS BEEN SEEN IN OTHER INDUSTRIES THAT ARE INVOLVED IN WOOD WORKING, ESPECIALLY SAWMILLS. WOOD DUSTS APPEAR TO PRODUCE A MUCOSTATIC AFFECT ON THE BODY. A STUDY HAS SUGGESTED THAT THIS AFFECT MAY BE OF IMPORTANCE IN THE DEVELOPMENT OF NASAL ADENOCARCINOMA IN FURNITURE WORKERS BECAUSE OF THE PROLONGED RETENTION OF WOOD DUST IN THE NASAL CAVITY.

WOOD CREOSOTE:

IRRITANT.

ACUTE EXPOSURE- MAY CAUSE MODERATE RESPIRATORY TRACT IRRITATION. IN ONE STUDY OF WORKERS WHO DEVELOPED CREOSOTE BURNS, A SMALL PERCENT ALSO COMPLAINED OF DEPRESSION, WEAKNESS, SEVERE HEADACHE, SLIGHT CONFUSION, VERTIGO, SALIVATION, AND NAUSEA. IT IS UNCLEAR WHETHER THE ROUTE OF EXPOSURE WAS SKIN CONTACT OR INHALATION OR BOTH.

CHRONIC EXPOSURE- A STUDY OF WORKERS SPRAYING WARMED CREOSOTE WITH CONCENTRATIONS UP TO 0.01 MG/L REPORTED HEADACHES, GIDDINESS, NAUSEA, VOMITING, AND SALIVATION.

COAL TAR CREOSOTE:

IRRITANT.

ACUTE EXPOSURE- MAY CAUSE MODERATE RESPIRATORY TRACT IRRITATION. IN ONE



...PERCENT ALSO  
SYMPTOMS OF DEPRESSION, WEAKNESS, SEVERE HEADACHE, SLIGHT CONFUSION,  
VERTIGO, SALIVATION AND NAUSEA. IT IS UNCLEAR WHETHER THE ROUTE OF  
EXPOSURE WAS SKIN CONTACT OR INHALATION OR BOTH.

CHRONIC EXPOSURE- A STUDY OF WORKERS SPRAYING WARMED CREOSOTE WITH  
CONCENTRATIONS UP TO 0.01 MG/L REPORTED HEADACHES, GIDDINESS, NAUSEA,  
VOMITING, AND SALIVATION.

FIRST AID- REMOVE FROM EXPOSURE AREA TO FRESH AIR IMMEDIATELY. IF BREATHING  
HAS STOPPED, PERFORM ARTIFICIAL RESPIRATION. KEEP PERSON WARM AND AT REST.  
GET MEDICAL ATTENTION IMMEDIATELY.

SKIN CONTACT:

WOOD DUST:

IRRITANT/SENSITIZER.

ACUTE EXPOSURE- ALL WOOD DUST HAVE BEEN IMPLICATED IN CAUSING IRRITATION.  
THIS IRRITATION MAY BE THE RESULT OF MECHANICAL MEANS AND/OR CHEMICAL  
AGENTS. MECHANICALLY CAUSED IRRITATION IS THE RESULT OF DUST PARTICLES  
BEING TRAPPED IN THE CLOTHES OF THE WORKER AND PRODUCING ABRASIONS. THE

CHEMICAL AGENTS MAY CAUSE CONTACT DERMATITIS WITH REDNESS, SCALING AND  
ITCHING. SEVERE CASES MAY PROGRESS TO BLISTERING OF THE SKIN. THE AREAS  
THAT ARE MOST OFTEN AFFECTED ARE THE FACE, EYELIDS, HANDS AND FOREARMS.  
SPLINTERS FROM SOME WOODS MAY PRODUCE SEPTIC WOUNDS THAT MAY TAKE AN  
EXTREMELY LONG TIME TO HEAL.

CHRONIC EXPOSURE- REPEATED OR PROLONGED EXPOSURE MAY RESULT IN ALLERGIC  
DERMATITIS. SENSITIZATION REACTIONS ARE ALSO DOCUMENTED. THESE REACTIONS  
MAY BE MILD WITH ONLY ERYTHEMA AND IRRITATION, BUT MORE OFTEN THERE IS  
VESICULAR DERMATITIS. THIS DERMATITIS MAY PROGRESS TO CHRONIC DERMATITIS.

WOOD CREOSOTE:

CORROSIVE/CARCINOGEN.

ACUTE EXPOSURE- THE LIQUID AND VAPORS ARE STRONG IRRITANTS AND MAY CAUSE A  
BURNING SENSATION, ITCHING, LOCAL ERYTHEMA PROGRESSING TO A BRONZE  
PIGMENTATION, PAPULAR AND VESICULAR ERUPTIONS, ULCERATION, AND  
DEQUAMATION. PHOTSENSITIZATION OCCURS, ESPECIALLY IN FAIR-SKINNED PERSONS  
PROLONGED CONTACT MAY CAUSE BURNS. IT IS READILY ABSORBED THROUGH THE SKIN  
AND MAY CAUSE SYSTEMIC ILLNESS WITH SALIVATION, VOMITING, HEADACHE,  
THREADY PULSE, RESPIRATORY DIFFICULTIES, LOSS OF PUPILLARY REFLEXES,  
HYPOTHERMIA, MILD CONVULSIONS, AND CYANOSIS. DEPRESSION, WEAKNESS, SLIGHT  
CONFUSION, NAUSEA, AND VERTIGO WERE ALSO REPORTED FROM ONE STUDY IN WHICH  
IT WAS NOT CLEAR WHETHER THE ROUTE OF EXPOSURE WAS INHALATION OR SKIN  
CONTACT OR BOTH.

CHRONIC EXPOSURE- REPEATED OR PROLONGED EXPOSURE MAY CAUSE DARKENING OF THE  
SKIN AND DERMATITIS. IF SUFFICIENT AMOUNTS ARE ABSORBED, SYSTEMIC SYMPTOMS  
AS WITH ACUTE EXPOSURE MAY OCCUR. FIVE CREOSOTES OR CREOSOTE OILS PRODUCED  
SKIN TUMORS WHEN APPLIED TO THE SKIN OF MICE; ONE ALSO PRODUCED LUNG  
TUMORS. HUMAN MORTALITY ANALYSIS OF CREOSOTE-EXPOSED BRICKMAKERS INDICATED  
INCREASED RISK OF MORTALITY FROM SCROTAL CANCER. MALIGNANT EPITHELIOMAS,  
ABOUT ONE-THIRD OF WHICH WERE SCROTAL, HAVE BEEN REPORTED IN SEVERAL CASE  
REPORTS OF WORKERS EXPOSED TO CREOSOTE.

COAL TAR CREOSOTE:

CORROSIVE/CARCINOGEN.

ACUTE EXPOSURE- THE LIQUID AND VAPORS ARE STRONG IRRITANTS AND MAY CAUSE A  
BURNING SENSATION, ITCHING, LOCAL ERYTHEMA PROGRESSING TO A BRONZE  
PIGMENTATION, PAPULAR AND VESICULAR ERUPTIONS, ULCERATION, AND  
DEQUAMATION. PHOTSENSITIZATION OCCURS, ESPECIALLY IN FAIR-SKINNED PERSONS  
PROLONGED CONTACT MAY CAUSE BURNS. IT IS READILY ABSORBED THROUGH THE SKIN  
AND MAY CAUSE SYSTEMIC ILLNESS WITH SALIVATION, VOMITING, HEADACHE,  
THREADY PULSE, RESPIRATORY DIFFICULTIES, LOSS OF PUPILLARY REFLEXES,  
HYPOTHERMIA, MILD CONVULSIONS, AND CYANOSIS. DEPRESSION, WEAKNESS, SLIGHT  
CONFUSION, NAUSEA, AND VERTIGO WERE ALSO REPORTED FROM ONE STUDY IN WHICH  
IT WAS NOT CLEAR WHETHER THE ROUTE OF EXPOSURE WAS INHALATION OR SKIN  
CONTACT OR BOTH.

CHRONIC EXPOSURE- REPEATED OR PROLONGED EXPOSURE MAY CAUSE DARKENING OF THE  
SKIN AND DERMATITIS. IF SUFFICIENT AMOUNTS ARE ABSORBED, SYSTEMIC SYMPTOMS



... WHEN APPLIED TO THE SKIN OF MICE; ONE ALSO PRODUCED LUNG  
TUMORS. HUMAN MORTAL ANALYSIS OF CREOSOTE-EXPOSED BRICKMAKERS INDICATED  
INCREASED RISK OF MORTALITY FROM SCROTAL CANCER. MALIGNANT EPITHELIOMAS,  
ABOUT ONE-THIRD OF WHICH WERE SCROTAL, HAVE BEEN REPORTED IN SEVERAL CASE  
REPORTS OF WORKERS EXPOSED TO CREOSOTE.

FIRST AID: A THOROUGH CLEANSING OF THE BODY, EACH DAY AS A MINIMUM, IS  
NECESSARY IN THE PREVENTION OF ADVERSE REACTIONS TO WOOD DUST. ANY WOUND  
RESULTING FROM SPLINTERS OR ABRASIONS SHOULD BE CLEANED THOROUGHLY.  
SPLINTERS SHOULD BE REMOVED AS QUICKLY AS POSSIBLE BY QUALIFIED MEDICAL  
PERSONNEL. IF AN INFECTION FROM A SPLINTER WOUND OCCURS SEEK PROMPT  
MEDICAL ATTENTION. REMOVE AND WASH CONTAMINATED CLOTHING AT THE END OF  
EACH DAY.

EYE CONTACT:

WOOD DUST:

IRRITANT.

ACUTE EXPOSURE- DIRECT CONTACT WITH WOOD DUST MAY CAUSE IRRITATION AND  
INFLAMMATION. MECHANICAL DAMAGE OF THE CORNEA MAY ALSO OCCUR.

CHRONIC EXPOSURE- REPEATED OR PROLONGED EXPOSURE MAY CAUSE CONJUNCTIVITIS.

WOOD CREOSOTE:

CORROSIVE.

ACUTE EXPOSURE- LIQUID CONTACT HAS CAUSED PAINFUL PROTRACTED  
KERATOCONJUNCTIVITIS INVOLVING LOSS OF CORNEAL EPITHELIUM, CLOUDING  
OF THE CORNEA, MIOSIS AND LONG-LASTING IRRITABILITY AND PHOTOPHOBIA.  
OTHER SYMPTOMS WHICH HAVE BEEN REPORTED FROM EXPOSURE TO CREOSOTE-TREATED  
PARTICLES INCLUDE ABRASION OF THE CORNEA WITH SOME PERMANENT SCARRING,  
HYPEREMIA, AND PRONOUNCED SEROUS SECRETION.

CHRONIC EXPOSURE- REPEATED OR PROLONGED EXPOSURE MAY CAUSE CONJUNCTIVITIS.

COAL TAR CREOSOTE:

CORROSIVE.

ACUTE EXPOSURE- LIQUID CONTACT HAS CAUSED PAINFUL PROTRACTED  
KERATOCONJUNCTIVITIS INVOLVING LOSS OF CORNEAL EPITHELIUM, CLOUDING  
OF THE CORNEA, MIOSIS AND LONG-LASTING IRRITABILITY AND PHOTOPHOBIA.  
OTHER SYMPTOMS WHICH HAVE BEEN REPORTED FROM EXPOSURE TO CREOSOTE-TREATED  
PARTICLES INCLUDE ABRASION OF THE CORNEA WITH SOME PERMANENT SCARRING,  
HYPEREMIA, AND PRONOUNCED SEROUS SECRETION.

CHRONIC EXPOSURE- REPEATED OR PROLONGED EXPOSURE MAY CAUSE CONJUNCTIVITIS.

FIRST AID- WASH EYES IMMEDIATELY WITH LARGE AMOUNTS OF WATER, OCCASIONALLY  
LIFTING UPPER AND LOWER LIDS, UNTIL NO EVIDENCE OF CHEMICAL REMAINS  
(APPROXIMATELY 15-20 MINUTES). GET MEDICAL ATTENTION IMMEDIATELY.

INGESTION:

WOOD DUST:

ACUTE EXPOSURE- NO DATA AVAILABLE.

CHRONIC EXPOSURE- NO DATA AVAILABLE.

WOOD CREOSOTE:

ACUTE EXPOSURE- HAS CAUSED INTENSE IRRITATION AND CONGESTION OF THE ENTIRE  
GASTROINTESTINE. SALIVATION, VOMITING, RESPIRATORY DIFFICULTIES,  
THREADY PULSE, VERTIGO, HEADACHE, LOSS OF PUPILLARY REFLEXES, HYPOTHERMIA,  
CYANOSIS AND MILD CONVULSIONS MAY ALSO OCCUR. DEATH FROM LARGE DOSES  
APPEARS LARGELY DUE TO CARDIOVASCULAR COLLAPSE.

CHRONIC EXPOSURE- REPEATED INGESTION OF SMALL DOSES MAY RESULT IN CHRONIC  
INTOXICATION CHARACTERIZED BY DISTURBANCES OF VISION AND DIGESTION  
INCLUDING INCREASED PERISTALSIS AND BLOODY STOOLS. IN ONE CASE,  
HYPERTENSION AND GENERAL CARDIOVASCULAR COLLAPSE WERE REPORTED. OTHER  
SYMPTOMS OF ACUTE EXPOSURE ARE ALSO POSSIBLE. MATERNAL REPRODUCTIVE  
EFFECTS HAVE BEEN REPORTED IN MICE FOLLOWING REPEATED EXPOSURES PRIOR TO  
MATING. PATERNAL REPRODUCTIVE EFFECTS HAVE BEEN REPORTED IN MICE AND RATS  
FOLLOWING REPEATED EXPOSURES PRIOR TO MATING.

COAL TAR CREOSOTE:

ACUTE EXPOSURE- HAS CAUSED INTENSE IRRITATION AND CONGESTION OF THE ENTIRE  
GASTROINTESTINE. SALIVATION, VOMITING, RESPIRATORY DIFFICULTIES,  
THREADY PULSE, VERTIGO, HEADACHE, LOSS OF PUPILLARY REFLEXES, HYPOTHERMIA,

CHRONIC EXPOSURE- REPEATED INGESTION OF SMALL DOSES MAY RESULT IN CHRONIC INTOXICATION CHARACTERIZED BY DISTURBANCES OF VISION AND DIGESTION INCLUDING INCREASED PERISTALSIS AND BLOODY STOOLS. IN ONE CASE, HYPERTENSION AND GENERAL CARDIOVASCULAR COLLAPSE WERE REPORTED. OTHER SYMPTOMS OF ACUTE EXPOSURE ARE ALSO POSSIBLE. PATERNAL REPRODUCTIVE EFFECTS HAVE BEEN REPORTED IN RATS AND MICE FOLLOWING REPEATED EXPOSURES PRIOR TO MATING.

FIRST AID- REMOVE BY GASTRIC LAVAGE OR EMESIS. MAINTAIN BLOOD PRESSURE AND AIRWAY. GIVE OXYGEN IF RESPIRATION IS DEPRESSED. DO NOT PERFORM GASTRIC LAVAGE OR EMESIS IF VICTIM IS UNCONSCIOUS. GET MEDICAL ATTENTION IMMEDIATELY. (DREISBACH, HANDBOOK OF POISONING, 11TH ED.) ADMINISTRATION OF GASTRIC LAVAGE OR OXYGEN SHOULD BE PERFORMED BY QUALIFIED MEDICAL PERSONNEL.

ANTIDOTE:

NO SPECIFIC ANTIDOTE. TREAT SYMPTOMATICALLY AND SUPPORTIVELY.

REACTIVITY

REACTIVITY:

WOOD DUST: STABLE UNDER NORMAL TEMPERATURE AND PRESSURE.

CREOSOTE: STABLE UNDER NORMAL TEMPERATURE AND PRESSURE.

INCOMPATIBILITIES:

WOOD DUST:

FIRE: POSSIBLE IGNITION AND/OR EXPLOSION.

STRONG OXIDIZERS: POSSIBLE FIRE AND EXPLOSION.

WOOD CREOSOTE:

ACACIA: INCOMPATIBLE.

ALBUMIN: INCOMPATIBLE.

CHLOROSULFONIC ACID: INCREASE IN TEMPERATURE AND PRESSURE WHEN MIXED IN CLOSED CONTAINER.

CUPRIC SALTS: INCOMPATIBLE.

FERRIC SALTS: INCOMPATIBLE.

GOLD SALTS: INCOMPATIBLE.

OXIDIZERS: FIRE AND EXPLOSION HAZARD.

SILVER SALTS: INCOMPATIBLE.

COAL TAR CREOSOTE:

CHLOROSULFONIC ACID: MIXING IN CLOSED CONTAINER RESULTS IN INCREASED TEMPERATURE AND PRESSURE.

STRONG OXIDIZERS: POSSIBLE VIOLENT REACTION.

DECOMPOSITION:

WOOD DUST: THERMAL DECOMPOSITION MAY RELEASE TOXIC OXIDES OF CARBON.

CREOSOTE: THERMAL DECOMPOSITION MAY RELEASE TOXIC OXIDES OF CARBON.

POLYMERIZATION:

HAZARDOUS POLYMERIZATION HAS NOT BEEN REPORTED TO OCCUR UNDER NORMAL TEMPERATURES AND PRESSURES.

STORAGE AND DISPOSAL

OBSERVE ALL FEDERAL, STATE AND LOCAL REGULATIONS WHEN STORING OR DISPOSING OF THIS SUBSTANCE.

\*\*\*STORAGE\*\*

STORE AWAY FROM INCOMPATIBLE SUBSTANCES.

\*\*\*\*\*

CONDITIONS TO AVOID

FINELY DIVIDED DUSTS MAY IGNITE EASILY.

LARGER DUSTS USUALLY REQUIRE LONGER EXPOSURE TIME TO HEAT OF FLAME BEFORE IGNITION OCCURS.

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SPILL AND LEAK PROCEDURES

OCCUPATIONAL SPILL:

NO SPECIAL PRECAUTIONS INDICATED.

PROVIDE LOCAL EXHAUST OR PROCESS ENCLOSURE VENTILATION TO MEET THE PUBLISHED EXPOSURE LIMITS. VENTILATION EQUIPMENT MUST BE EXPLOSION-PROOF.

RESPIRATORY:

THE SPECIFIC RESPIRATOR SELECTED MUST BE BASED ON THE CONTAMINATION LEVELS FOUND IN THE WORK PLACE; MUST NOT EXCEED THE WORKING LIMITS OF THE RESPIRATOR AND BE JOINTLY APPROVED BY THE NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH AND THE MINE SAFETY AND HEALTH ADMINISTRATION.

THE FOLLOWING RESPIRATORS ARE RECOMMENDED BASED ON THE DATA FOUND IN THE PHYSICAL DATA, HEALTH EFFECTS AND TOXICITY SECTIONS. THEY ARE RANKED IN ORDER FROM MINIMUM TO MAXIMUM RESPIRATORY PROTECTION:

DUST MASK, INCLUDING SINGLE USE.

CHEMICAL CARTRIDGE RESPIRATOR WITH AN ORGANIC VAPOR CARTRIDGE(S) WITH DUST FILTER.

GAS MASK WITH ORGANIC VAPOR CANISTER (CHIN STYLE OR FRONT- OR BACK-MOUNTED CANISTER) WITH A DUST FILTER.

TYPE "C" SUPPLIED-AIR RESPIRATOR OPERATED IN THE PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE OR CONTINUOUS-FLOW MODE.

SELF-CONTAINED BREATHING APPARATUS.

FOR FIREFIGHTING AND OTHER IMMEDIATELY DANGEROUS TO LIFE OR HEALTH CONDITIONS:

SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN PRESSURE DEMAND OR OTHER POSITIVE PRESSURE MODE.

SUPPL. J-AIR RESPIRATOR WITH FULL FACEPIECE AND OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE IN COMBINATION WITH AN AUXILIARY

SELF-CONTAINED BREATHING APPARATUS OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE.

CLOTHING:

EMPLOYEE MUST WEAR APPROPRIATE PROTECTIVE (IMPERVIOUS) CLOTHING AND EQUIPMENT TO PREVENT REPEATED OR PROLONGED SKIN CONTACT WITH THIS SUBSTANCE.

GLOVES:

EMPLOYEE MUST WEAR APPROPRIATE PROTECTIVE GLOVES TO PREVENT CONTACT WITH THIS SUBSTANCE.

EYE PROTECTION:

EMPLOYEE MUST WEAR SPLASH-PROOF OR DUST-RESISTANT SAFETY GOGGLES TO PREVENT EYE CONTACT WITH THIS SUBSTANCE.

CREATION DATE: 01/24/86

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\*\*END OF DOCUMENT REACHED\*\*

DISPLAY OPTIONS:

1 - SHOW CAS NUMBER, CHEMICAL NAME, AND SYNONYMS

2 - SHOW FULL MATERIAL SAFETY DATA SHEET

3 - SEND AN MSDS W/PAGE NUMBERS ERROR FREE TO YOUR ALTOS OR PC

4 - PRINT ON A SERIAL PRINTER (LAB USE ONLY)

SEARCH OPTIONS:

5 - NARROW SEARCH WITH ADDITIONAL SEARCH TERMS

6 - NEW SEARCH

EXIT OPTION:

END - LEAVE THE DATABASE

SELECTION? END